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Sequence Listing was accepted.
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Reviewer: markspencer
Timestamp: [year=2008; month=7; day=28; hr=9; min=40; sec=6; ms=230;]
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Validated By CRFValidator v 1.0.3

Application No: 10516317 Version No: 2.0

Input Set:

Output Set:

Started: 2008-07-25 21:38:45.411
Finished: 2008-07-25 21:38:47.803
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 392 ms
Total Warnings: 22
Total Errors: 0
No. of SeqIDs Defined: 22
Actual SeqID Count: 22

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W 402	Undefined organism found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
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W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 402	Undefined organism found in <213> in SEQ ID (11)
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W 402	Undefined organism found in <213> in SEQ ID (19)
W 402	Undefined organism found in <213> in SEQ ID (20)

Input Set:

Output Set:

Started: 2008-07-25 21:38:45.411
Finished: 2008-07-25 21:38:47.803
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 392 ms
Total Warnings: 22
Total Errors: 0
No. of SeqIDs Defined: 22
Actual SeqID Count: 22

Error code	Error Description
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KARASAWA, SATOSHI

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<130> P26359

<140> 10516317
<141> 2005-09-26

<150> PCT/JP03/07336
<151> 2003-06-10

<150> JP 2002-168583
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<170> PatentIn version 3.3

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<213> Cnidopus japonicus

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Lys Pro Tyr Glu Gly Thr Gln Met Glu Asn Ile Lys Val Thr Lys Gly
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Gly Pro Leu Pro Phe Ser Phe Asp Ile Leu Thr Pro Asn Cys Gln Tyr
     50                  55                  60

Gly Ser Val Ala Ile Thr Lys Tyr Thr Ser Gly Ile Pro Asp Tyr Phe
 65                  70                  75                  80

Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Ile Tyr
                 85                  90                  95

Glu Asp Gly Ala Tyr Leu Thr Thr Gln Gln Glu Thr Lys Leu Asp Gly
            100                 105                 110

Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
        115                 120                 125

Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
    130                 135                 140
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Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
145                 150                 155                 160

Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
                165                 170                 175

Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln Met Pro Pro Phe
            180                 185                 190

His Phe Ser Asp His Arg Pro Glu Ile Val Lys Val Ser Glu Asn Gly
        195                 200                 205

Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr
    210                 215                 220

Cys Pro Ser Lys Leu Gly His Asn
225                 230
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<220>
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ggc aca gtc aac aat cat cac ttc atg tgc gaa gct gaa gga gag ggc   96
Gly Thr Val Asn Asn His His Phe Met Cys Glu Ala Glu Gly Glu Gly
             20                  25                  30

aag cca tac gag gga act caa atg gag aac ata aaa gtc acc aaa gga   144
Lys Pro Tyr Glu Gly Thr Gln Met Glu Asn Ile Lys Val Thr Lys Gly
         35                  40                  45

ggc cct ctg ccg ttc tct ttt gat atc ttg acg cct aac tgc caa tat   192
Gly Pro Leu Pro Phe Ser Phe Asp Ile Leu Thr Pro Asn Cys Gln Tyr
     50                  55                  60

gga agc gta gcc ata acc aag tat aca tca ggg att cca gac tac ttt   240
Gly Ser Val Ala Ile Thr Lys Tyr Thr Ser Gly Ile Pro Asp Tyr Phe
 65                  70                  75                  80

aag caa tct ttt cct gaa gga ttt acc tgg gaa aga acc aca atc tac   288
Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Ile Tyr
                 85                  90                  95

gaa gat ggg gct tac ctt aca act caa caa gaa acc aaa ctt gat gga   336
Glu Asp Gly Ala Tyr Leu Thr Thr Gln Gln Glu Thr Lys Leu Asp Gly
            100                 105                 110
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aat tgc ctc gtc tac aat att aaa atc ctt gga tgt aat ttt ccc ccc   384
Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
        115                 120                 125

aat ggt cct gtg atg cag aag aaa acc caa ggc tgg gaa ccc tgt tgc   432
Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
    130                 135                 140

gag atg cgc tat aca cgt gat ggt gtg cta tgt ggc caa aca tta atg   480
Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
145                 150                 155                 160

gca ctt aaa tgc gcc gat ggg aac cac ctc act tgc cat ctg aga act   528
Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
                165                 170                 175

act tac agg tcc aaa aag gca gca aag gcg ttg cag atg cca ccc ttc   576
Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln Met Pro Pro Phe
            180                 185                 190

cat ttt tca gac cat cgt cct gaa ata gtg aag gtt tca gag aac ggc   624
His Phe Ser Asp His Arg Pro Glu Ile Val Lys Val Ser Glu Asn Gly
        195                 200                 205

aca cta ttt gaa cag cac gaa agt tca gtg gcc agg tac tgt caa aca   672
Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr
    210                 215                 220

tgc cca tct aaa ctt ggt cac aat taa                              699
Cys Pro Ser Lys Leu Gly His Asn
225                 230
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primer

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<212> DNA
<213> Artificial Sequence

<220>
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primer

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<210> 8
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<220>
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<400> 8
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<213> Cnidopus japonicus

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Gly Thr Val Asn Asn His His Phe Met Cys Glu Ala Glu Gly Glu Gly
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Lys Pro Tyr Glu Gly Thr Gln Met Glu Asn Ile Lys Val Thr Lys Gly
35 40 45

Gly Pro Leu Pro Phe Ser Phe Asp Ile Leu Thr Pro Asn Cys Gln Leu
50 55 60

Gly Ser Val Ala Ile Thr Lys Tyr Thr Ser Gly Ile Pro Asp Tyr Phe
65 70 75 80

Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Ile Tyr
85 90 95

Glu Asp Gly Ala Tyr Leu Thr Thr Gln Gln Glu Thr Lys Leu Asp Gly
100 105 110

Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
115 120 125

Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
130 135 140

Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
145 150 155 160

Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
165 170 175

Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln Met Pro Pro Phe
180 185 190

His Phe Ser Asp His Arg Pro Glu Ile Val Lys Val Ser Glu Asn Gly
195 200 205

Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr
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Cys Pro Ser Lys Leu Gly His Asn
225                 230
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<210> 12
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<213> Cnidopus japonicus

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ggc aca gtc aac aat cat cac ttc atg tgc gaa gct gaa gga gag ggc   96
Gly Thr Val Asn Asn His His Phe Met Cys Glu Ala Glu Gly Glu Gly
             20                  25                  30

aag cca tac gag gga act caa atg gag aac ata aaa gtc acc aaa gga   144
Lys Pro Tyr Glu Gly Thr Gln Met Glu Asn Ile Lys Val Thr Lys Gly
         35                  40                  45

ggc cct ctg ccg ttc tct ttt gat atc ttg acg cct aac tgc caa ctt   192
Gly Pro Leu Pro Phe Ser Phe Asp Ile Leu Thr Pro Asn Cys Gln Leu
     50                  55                  60

gga agc gta gcc ata acc aag tat aca tca ggg att cca gac tac ttt   240
Gly Ser Val Ala Ile Thr Lys Tyr Thr Ser Gly Ile Pro Asp Tyr Phe
 65                  70                  75                  80

aag caa tct ttt cct gaa gga ttt acc tgg gaa aga acc aca atc tac   288
Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Ile Tyr
                 85                  90                  95

gaa gat ggg gct tac ctt aca act caa caa gaa acc aaa ctt gat gga   336
Glu Asp Gly Ala Tyr Leu Thr Thr Gln Gln Glu Thr Lys Leu Asp Gly
            100                 105                 110

aat tgc ctc gtc tac aat att aaa atc ctt gga tgt aat ttt ccc ccc   384
Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
        115                 120                 125

aat ggt cct gtg atg cag aag aaa acc caa ggc tgg gaa ccc tgt tgc   432
Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
    130                 135                 140

gag atg cgc tat aca cgt gat ggt gtg cta tgt ggc caa aca tta atg   480
Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
145                 150                 155                 160

gca ctt aaa tgc gcc gat ggg aac cac ctc act tgc cat ctg aga act   528
Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
                165                 170                 175
```

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act tac agg tcc aaa aag gca gca aag gcg ttg cag atg cca ccc ttc   576
Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln Met Pro Pro Phe
            180                 185                 190

cat ttt tca gac cat cgt cct gaa ata gtg aag gtt tca gag aac ggc   624
His Phe Ser Asp His Arg Pro Glu Ile Val Lys Val Ser Glu Asn Gly
        195                 200                 205

aca cta ttt gaa cag cac gaa agt tca gtg gcc agg tac tgt caa aca   672
Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr
    210                 215                 220

tgc cca tct aaa ctt ggt cac aat taa                              699
Cys Pro Ser Lys Leu Gly His Asn
225                 230
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<210> 13
<211> 232
<212> PRT
<213> Cnidopus japonicus

<400> 13

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  1               5                  10                  15

Gly Thr Val Asn Asn His His Phe Met Cys Glu Ala Glu Gly Glu Gly
             20                  25                  30

Lys Pro Tyr Glu Gly Thr Gln Met Glu Asn Ile Lys Val Thr Lys Gly
         35                  40                  45

Gly Pro Leu Pro Phe Ser Phe Asp Ile Leu Thr Pro Asn Cys Gln Met
     50                  55                  60

Gly Ser Val Ala Ile Thr Lys Tyr Thr Ser Gly Ile Pro Asp Tyr Phe
 65                  70                  75                  80

Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Ile Tyr
                 85                  90                  95

Glu Asp Gly Ala Tyr Leu Thr Thr Gln Gln Glu Thr Lys Leu Asp Gly
            100                 105                 110

Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
        115                 120                 125

Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
    130                 135                 140

Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
145                 150                 155                 160

Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
                165                 170                 175
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Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln Met Pro Pro Phe
            180                 185                 190

His Phe Ser Asp His Arg Pro Glu Ile Val Lys Val Ser Glu Asn Gly
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Thr Leu Phe Glu Gln His Glu Ser Ser Val Ala Arg Tyr Cys Gln Thr
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Cys Pro Ser Lys Leu Gly His Asn
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<220>
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ggc aca gtc aac aat cat cac ttc atg tgc gaa gct gaa gga gag ggc   96
Gly Thr Val Asn Asn His His Phe Met Cys Glu Ala Glu Gly Glu Gly
             20                  25                  30

aag cca tac gag gga act caa atg gag aac ata aaa gtc acc aaa gga   144
Lys Pro Tyr Glu Gly Thr Gln Met Glu Asn Ile Lys Val Thr Lys Gly
         35                  40                  45

ggc cct ctg ccg ttc tct ttt gat atc ttg acg cct aac tgc caa atg   192
Gly Pro Leu Pro Phe Ser Phe Asp Ile Leu Thr Pro Asn Cys Gln Met
     50                  55                  60

gga agc gta gcc ata acc aag tat aca tca ggg att cca gac tac ttt   240
Gly Ser Val Ala Ile Thr Lys Tyr Thr Ser Gly Ile Pro Asp Tyr Phe
 65                  70                  75                  80

aag caa tct ttt cct gaa gga ttt acc tgg gaa aga acc aca atc tac   288
Lys Gln Ser Phe Pro Glu Gly Phe Thr Trp Glu Arg Thr Thr Ile Tyr
                 85                  90                  95

gaa gat ggg gct tac ctt aca act caa caa gaa acc aaa ctt gat gga   336
Glu Asp Gly Ala Tyr Leu Thr Thr Gln Gln Glu Thr Lys Leu Asp Gly
            100                 105                 110

aat tgc ctc gtc tac aat att aaa atc ctt gga tgt aat ttt ccc ccc   384
Asn Cys Leu Val Tyr Asn Ile Lys Ile Leu Gly Cys Asn Phe Pro Pro
        115                 120                 125

aat ggt cct gtg atg cag aag aaa acc caa ggc tgg gaa ccc tgt tgc   432
Asn Gly Pro Val Met Gln Lys Lys Thr Gln Gly Trp Glu Pro Cys Cys
    130                 135                 140
```

```
gag atg cgc tat aca cgt gat ggt gtg cta tgt ggc caa aca tta atg   480
Glu Met Arg Tyr Thr Arg Asp Gly Val Leu Cys Gly Gln Thr Leu Met
145                 150                 155                 160

gca ctt aaa tgc gcc gat ggg aac cac ctc act tgc cat ctg aga act   528
Ala Leu Lys Cys Ala Asp Gly Asn His Leu Thr Cys His Leu Arg Thr
                165                 170                 175

act tac agg tcc aaa aag gca gca aag gcg ttg cag atg cca ccc ttc   576
Thr Tyr Arg Ser Lys Lys Ala Ala Lys Ala Leu Gln M
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